

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1. - 36. (Cancelled).

37. (Currently Amended) The method of claim 38 [[36]], wherein the related data objects further comprise linked data objects from a second process chain that are later in time than the initial data object, and that are dependent upon changes to the initial data object.

38. (Currently Amended) The method of claim 36, A method performed by a computer system for processing data objects that describe developments of business transactions, the method comprising:

selecting an initial data object to be updated;

identifying a first process chain of the initial data object, wherein the first process chain comprises a series of linked data objects, including the initial data object, and wherein the linked data objects each describe developments of a common business transaction at different points in time;

determining related data objects that are dependent upon changes to the initial data object, wherein the related data objects comprise linked data objects from the first process chain that are later in time than the initial data object;

updating the related data objects and the initial data object, wherein the updating further comprises:

locking real-time access of the related data objects;
updating the initial data object; and
updating the related data objects while locked from real-time
access[[.]]; and
storing the related data objects and the initial data object in a database
accessible by the computer system.

39. (Currently Amended) The method of claim 36, A method performed by a
computer system for processing data objects that describe developments of
business transactions, the method comprising:
- selecting an initial data object to be updated;
identifying a first process chain of the initial data object, wherein the first
process chain comprises a series of linked data objects, including
the initial data object, and wherein the linked data objects each
describe developments of a common business transaction at
different points in time;
determining related data objects that are dependent upon changes to the
initial data object, wherein the related data objects comprise linked
data objects from the first process chain that are later in time than
the initial data object;
updating the related data objects and the initial data object, wherein the
updating further comprises:
cancelling at least one of the related data objects; and
updating the initial data object[[.]]; and
storing the related data objects and the initial data object in a database
accessible by the computer system.

40. (Currently Amended) The method of claim 36, A method performed by a computer system for processing data objects that describe developments of business transactions, the method comprising:
- selecting an initial data object to be updated;
- identifying a first process chain of the initial data object, wherein the first process chain comprises a series of linked data objects, including the initial data object, and wherein the linked data objects each describe developments of a common business transaction at different points in time;
- determining related data objects that are dependent upon changes to the initial data object, wherein the related data objects comprise linked data objects from the first process chain that are later in time than the initial data object;
- updating the related data objects and the initial data object, wherein the data objects comprise a time index, and wherein the updating updates the related data objects in reverse chronological order, starting with a related data object with a most recent time index and ending with the initial data object, and
- storing the related data objects and the initial data object in a database accessible by the computer system.
41. (Currently Amended) The method of claim 38 [[36]], wherein the data objects are locked from real-time access upon selection of the initial data object until termination of the updating.

42. (Currently Amended) The method of claim 38 [[36]], wherein the determining further comprises grouping and sorting the related data objects.
43. (Cancelled).
44. (Currently Amended) The ~~method~~ computer system of claim 45 [[43]], wherein the related data objects further comprise linked data objects from a second process chain that are later in time than the initial data object, and that are dependent upon changes to the initial data object.
45. (Currently Amended) ~~The method of claim 43, A computer system comprising:~~
a database comprising data objects that describe developments of business transactions; and
a computing unit comprising:
a selection module for selecting an initial data object to be updated;
a preparation module for identifying a first process chain of the initial data object, wherein the first process chain comprises a series of linked data objects, including the initial data object, and wherein the linked data objects each describe developments of a common business transaction at different points in time, and wherein the preparation module further determines related data objects that are dependent upon changes to the initial data object, wherein the related data objects comprise linked data objects from the first

process chain that are later in time than the initial data object; and

a process module for updating the related data objects and the initial data object and for storing the related data objects and the initial data object in a database, further wherein the process module further comprises is for locking real-time access of the related data objects, updating the initial data object, and updating the related data objects while locked from real-time access.

46. (Currently Amended) The method of claim 43, A computer system comprising:

a database comprising data objects that describe developments of business transactions; and

a computing unit comprising:

a selection module for selecting an initial data object to be updated;

a preparation module for identifying a first process chain of the initial data object, wherein the first process chain comprises a series of linked data objects, including the initial data object, and wherein the linked data objects each describe developments of a common business transaction at different points in time, and wherein the preparation module further determines related data objects that are dependent upon changes to the initial data object, wherein the related data objects comprise linked data objects from the first

process chain that are later in time than the initial data object; and

a process module for updating the related data objects and the initial data object and for storing the related data objects and the initial data object in a database, further wherein the process module is for further comprises cancelling at least one of the related data objects, and updating the initial data object.

47. (Currently Amended) The method of claim 43, A computer system comprising:

a database comprising data objects that describe developments of business transactions; and

a computing unit comprising:

a selection module for selecting an initial data object to be updated;

a preparation module for identifying a first process chain of the initial data object, wherein the first process chain comprises a series of linked data objects, including the initial data object, and wherein the linked data objects each describe developments of a common business transaction at different points in time, and wherein the preparation module further determines related data objects that are dependent upon changes to the initial data object, wherein the related data objects comprise linked data objects from the first process chain that are later in time than the initial data object; and

a process module for updating the related data objects and the initial data object and for storing the related data objects and the initial data object in a database,
wherein the data objects comprise a time index, and
further wherein the process module is for updating updates the related data objects in reverse chronological order, starting with a related data object with a most recent time index and ending with the initial data object.

48. (Currently Amended) The method computer system of claim 45 [[43]], wherein the data objects are locked from real-time access upon selection of the initial data object until termination of the updating.
49. (Currently Amended) The method computer system of claim 45 [[43]], wherein the preparation module further comprises grouping and sorting the related data objects.
50. (Cancelled).
51. (Currently Amended) The computer program of claim 52 [[50]], wherein the related data objects further comprise linked data objects from a second process chain that are later in time than the initial data object, and that are dependent upon changes to the initial data object.

52. (Currently Amended) The computer program of claim 50, A computer program stored on a computer-readable storage medium containing instructions, that, when executed on at least one processor, cause the at least one processor to perform a method, the method comprising:

selecting an initial data object to be updated;

identifying a first process chain of the initial data object, wherein the first process chain comprises a series of linked data objects, including the initial data object, and wherein the linked data objects each describe developments of a common business transaction at different points in time;

determining related data objects that are dependent upon changes to the initial data object, wherein the related data objects comprise linked data objects from the first process chain that are later in time than the initial data object;

updating the related data objects and the initial data object, wherein the updating further comprises:

locking real-time access of the related data objects;

updating the initial data object; and

updating the related data objects while locked from real-time access[.]]; and

storing the related data objects and the initial data object in a database accessible by the at least one processor.

53. (Currently Amended) The method of claim 50, A computer program stored on a computer-readable storage medium containing instructions, that, when executed on at least one processor, cause the at least one processor to perform a method, the method comprising:

selecting an initial data object to be updated;

identifying a first process chain of the initial data object, wherein the first process chain comprises a series of linked data objects, including the initial data object, and wherein the linked data objects each describe developments of a common business transaction at different points in time;

determining related data objects that are dependent upon changes to the initial data object, wherein the related data objects comprise linked data objects from the first process chain that are later in time than the initial data object;

updating the related data objects and the initial data object, wherein the updating further comprises:

cancelling at least one of the related data objects; and

updating the initial data object[.]; and

storing the related data objects and the initial data object in a database accessible by the at least one processor.

54. (Currently Amended) The computer program of claim 50, A computer program stored on a computer-readable medium containing instructions, that, when executed on at least one processor, cause the at least one processor to perform a method, the method comprising:

selecting an initial data object to be updated;

identifying a first process chain of the initial data object, wherein the first process chain comprises a series of linked data objects, including the initial data object, and wherein the linked data objects each describe developments of a common business transaction at different points in time;

determining related data objects that are dependent upon changes to the initial data object, wherein the related data objects comprise linked data objects from the first process chain that are later in time than the initial data object;

updating the related data objects and the initial data object, wherein the data objects comprise a time index, and wherein the updating updates the related data objects in reverse chronological order, starting with a related data object with a most recent time index and ending with the initial data object[[.]];

storing the related data objects and the initial data object in a database accessible by the at least one processor.

55. (Currently Amended) The computer program of claim 52 [[50]], wherein the data objects are locked from real-time access upon selection of the initial data object until termination of the updating.
56. (Currently Amended) The computer program of claim 52 [[50]], wherein the determining further comprises grouping and sorting the related data objects.
57. (New) The method of claim 39, wherein the related data objects further comprise linked data objects from a second process chain that are later in time than the initial data object, and that are dependent upon changes to the initial data object.

58. (New) The method of claim 40, wherein the related data objects further comprise linked data objects from a second process chain that are later in time than the initial data object, and that are dependent upon changes to the initial data object.
59. (New) The method of claim 39, wherein the data objects are locked from real-time access upon selection of the initial data object until termination of the updating.
60. (New) The method of claim 40, wherein the data objects are locked from real-time access upon selection of the initial data object until termination of the updating.
61. (New) The method of claim 39, wherein the determining further comprises grouping and sorting the related data objects.
62. (New) The method of claim 40, wherein the determining further comprises grouping and sorting the related data objects.
63. (New) The computer system of claim 46, wherein the related data objects further comprise linked data objects from a second process chain that are later in time than the initial data object, and that are dependent upon changes to the initial data object.

64. (New) The computer system of claim 47, wherein the related data objects further comprise linked data objects from a second process chain that are later in time than the initial data object, and that are dependent upon changes to the initial data object.
65. (New) The computer system of claim 46, wherein the data objects are locked from real-time access upon selection of the initial data object until termination of the updating.
66. (New) The computer system of claim 47, wherein the data objects are locked from real-time access upon selection of the initial data object until termination of the updating.
67. (New) The computer system of claim 46, wherein the preparation module further comprises grouping and sorting the related data objects.
68. (New) The computer system of claim 47, wherein the preparation module further comprises grouping and sorting the related data objects.
69. (New) The computer program of claim 53, wherein the related data objects further comprise linked data objects from a second process chain that are later in time than the initial data object, and that are dependent upon changes to the initial data object.

70. (New) The computer program of claim 54, wherein the related data objects further comprise linked data objects from a second process chain that are later in time than the initial data object, and that are dependent upon changes to the initial data object.
71. (New) The computer program of claim 53, wherein the data objects are locked from real-time access upon selection of the initial data object until termination of the updating.
72. (New) The computer program of claim 54, wherein the data objects are locked from real-time access upon selection of the initial data object until termination of the updating.
73. (New) The computer program of claim 53, wherein the determining further comprises grouping and sorting the related data objects.
74. (New) The computer program of claim 54, wherein the determining further comprises grouping and sorting the related data objects.